Abstract

An integrally built, linear array of cuvettes is made of a plastic material. Every cuvette of the array has the same shape and dimensions. Neighboring cuvettes are connected to each other by a single web. Each of the single webs has a curved shape and each cuvette has means forming integral part thereof and serving for accurately positioning the cuvette into an opening of a cuvette holder and means for removably connecting the cuvette to the cuvette holder. Each cuvette has an upper chamber and a lower chamber having a common symmetry axis passing through the centers of both chambers. Each of the upper and lower chambers has a substantially cylindrical shape. The cross-section of the upper chamber at the central part thereof is larger than the cross-section of the lower chamber. The lower chamber has an open lower end. The upper chamber has an open top end and an annular bottom wall having a central circular opening which connects the upper chamber with the lower chamber. The inner surface of the bottom wall of the upper chamber (17) is part of a conical surface the cross-section of which forms an angle of about 80 degrees with the symmetry axis, so that there is an abrupt change of cross-section between the upper chamber and the lower chamber. A two-dimensional array of cuvettes comprises a plurality of linear cuvette arrays inserted into a cuvette holder having a matrix array of cuvette receiving openings. A system of two-dimensional cuvette arrays is built by stacking two or more of such two-dimensional arrays of cuvettes. Foil shaped layers serving, e.g. as a filter, are adapted to be attached to each cuvette to cover at least one opening thereof.

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